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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/270,273	03/16/1999	KAZUYA KINOSHITA	P7156-9012	2283

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EXAMINER

LEE, PING

ART UNIT PAPER NUMBER

2644

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/270,273

Applicant(s)

KINOSHITA, KAZUYA

Examiner

Ping Lee

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

1. The drawings were received on 10/20/04. These drawings are approved.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The limitation on line 5 of claim 2 is not an accurate description of the present invention. In view of Fig. 2, it is the average value being compared with the held noise level.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application

Art Unit: 2644

being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Itoh et al (US 5,757,937).

Itoh et al disclose a noise level updating system with a detector means (31 of Fig. 2), a noise level holding section (33), determining means (20) and updating means (eq. 2).

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Satoh et al (US 5,293,588).

Satoh et al disclose a noise level updating system with a detector means (101 of Fig. 15), a noise level holding section (124), determining means (eq. 26 or 28) and updating means (eq. 27, 29). See col. 10.

### ***Response to Arguments***

8. Applicant's arguments filed 10/20/04 have been fully considered but they are not persuasive.

Applicant argued, on p. 6, that element 31 in Itoh couldn't be read as the claimed detector means because applicant alleged that the claimed detector detects a noise level in scalar quantity.

First of all, none of the claims specifies that the detector means detects a noise level in scalar quantity. Secondly, "to detect" means to discover or determine the existence, presence, or fact of according to the dictionary. Element 31 in Fig. 2 of Itoh can be read as the claimed detector means because it discovers or determines the noise level when the input signal is a noise. The output from element 31 is the representation of the noise level in frequency domain. A frequency analysis is to determine the quantity at each frequency bin. On the contrary, time analysis is to determine the quantity at each time frame.

Applicant argued, on p. 6, that  $S(f)$  of Fig. 8 in Itoh is not a detector means.

Examiner did not say that  $S(f)$  is a detector means. Element 31 of Itoh is being read as the claimed detector means. Element 31 generates output  $S(f)$ .  $S(f)$  is the amplitude (scalar quantity) of the signal at frequency  $f$ . Claim 1 never specifies that the detector means cannot detect the signal and represent in the signal in two-dimensional indication quantity. Claim 1 specifies "detector means for detecting a noise level of an input signal". The claimed detector means could read on any means that discover or determine the noise level in narrow band or in broadband.

Applicant argued, on p. 7, that Itoh fails to show the claimed determining means.

It is noticed that in order to determine whether to update, a decision is made based on equation 8. In equation 8, the power is one of the variables. The average

Art Unit: 2644

power is calculated based on each analysis period, which is read as the claimed “a plurality of subsequent noise levels”. Applicant’s argument that equation 8 does not update the noise level as a scaler quantity is irrelevant because the claimed detector means could read on any means that discover or determine the noise level in narrow band or in broadband.

Applicant argued that Itoh fails to show noise level holding section.

Itoh shows that element 33 will hold (switch to N) the incoming  $S(f)$  detected by the detector means (element 31). Therefore, Itoh shows the claimed limitation.

Applicant argued, on p. 9, that Satoh’s element 101 cannot be read as the noise level detector means.

According to dictionary, “to detect” means to discover or determine the existence, presence, or fact of. Element 101 of Satoh can be read as the claimed detector means because it discovers or determines the noise level when the input signal is a noise.

Applicant argued, on p. 9, that Satoh’s element 124 is not the claimed noise level holding section.

When the input signal to element 123 from element 101 is a noise, element 124 stores noise level as the claimed noise level holding section.

Applicant argued, on p. 9, that equations 26 and 28 cannot be read as the determining means.

The average power  $P(n)$  is calculated based on a frame, which is a plurality of subsequent noise levels when the subsequent signal is a noise.

Applicant argued that equations 27 ad 29 cannot be read as the updating means.

Since Satoh shows that threshold is function of power, which represents the noise power when the input is a noise, then the updated threshold can be reads as the updated held noise level.

Applicant argued that Satoh fails to show the claimed limitation in claim 3.

As discussed above,  $P(n)$  represents the average of the subsequent noise level (col. 10, lines 41-42),  $T(n)$  is a function of the held noise level. Equation 26 shows whether to update based on the condition. Therefore, Satoh shows the claimed limitation.

#### ***Allowable Subject Matter***

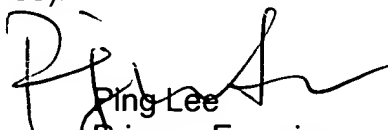
9. Claim 2 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ping Lee whose telephone number is 703-305-4865. The examiner can normally be reached on Monday and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh N Tran can be reached on 703-305-4040. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2644

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Ping Lee  
Primary Examiner  
Art Unit 2644

pwl